ABSTRACT

A double transdominant fusion gene (*trev*) to simultaneously inhibit two functions essential for HIV expression was constructed by linking *tat* and *rev* transdominant mutants. Trev was shown to independently inhibit both Tat and Rev functions in a human T cell line. Stably expressed Trev localized within the nucleus and exhibited a greater combinatorial effect than either single transdominant gene alone. Cells transfected with Trev showed a stable 20 to 30 fold inhibition of HIV propagation and were protected against viral cytopathic effects. Simultaneous inhibition of two essential viral genes present significant advantages for potential gene therapy treatment of HIV infection.